



PATENT APPLICATION  
Mo4805  
LeA 31,454

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN APPLICATION OF

KARL W. DIETRICH ET AL

SERIAL NO.: 09/077,914

FILED: JUNE 4, 1998

TITLE: PROCESS FOR PREPARING  
RIGID FOAMED MATERIALS  
CONTAINING URETHANE  
GROUPS

) GROUP NO.: 1711

) EXAMINER: M FOELAK

RECEIVED  
JUL 03 2002  
TC 1700

DECLARATION UNDER 37 CFR 1.132

Assistant Commissioner for Patents

Washington, D.C. 20231

Sir:

I, Norbert Eisen, a German citizen, residing at Ulmenallee 59A, 50999 Cologne, Germany, declare as follows:

- 1) That I have studied chemistry at the University of Bonn and received the degree of doctor rer. nat. at this University in 1987;
- 2) That since 1987 I have been in the employ of Bayer AG of Leverkusen, Germany, as a research chemist;
- 3) That in the course of my employment I have gained considerable expertise in the field of polyurethanes;
- 4) That I am a named inventor in the patent application bearing U.S. Serial Number 09/077,914, claiming foreign priority of German Patent Application 195 46 461.3 filed December 13, 1995;

- 5) That I have read and am familiar with the DeVos et al U.S. Patent 5,444,101;
- 6) That the following experiments were conducted under my supervision:

**EXAMPLE A (present invention):** A foam was produced from the materials listed and by the process described in Example 4 of the specification. The polyol mixture employed was a mixture of 50 parts by weight of o-toluene diamine-initiated polyether and 50 parts by weight of a sugar-initiated polyol.

**EXAMPLE B (Comparative):** The procedure of EXAMPLE A was repeated using the same materials with the exception that the polyol component was a mixture composed of 15 parts by weight of the o-toluene diamine-initiated polyol and 85 parts by weight of the sugar-initiated polyol plus the water, stabilizer and activator.

**EXAMPLE C (Comparative):** The procedure of EXAMPLE A was repeated using the same materials with the exception that the polyol component was a mixture composed of 70 parts by weight of the o-toluene diamine-initiated polyol and 30 parts by weight of the sugar-initiated polyol plus the water, stabilizer and activator.

The properties of the foams produced in each of EXAMPLES A, B and C are reported in the Table below.

EXAMPLE	Thermal Conductivity (mW/mk) [DIN 52 616, 24°C]	Compressive Strength (MPa) [DIN 53 421, 10% compressive strain]
A	21.4	0.13
B	22.5	0.18
C	21.4	0.17

It can be seen from the data presented in the Table that the foam produced with less aromatic amine-initiated polyol than required in the present invention (Comparative EXAMPLE B) had a worse thermal conductivity than the foam made in accordance with the present invention (EXAMPLE A).

The foam produced with more amine-initiated polyol than required in the present invention (Comparative EXAMPLE C) had a worse compressive strength than the foam made in accordance with the present invention (EXAMPLE A).

The undersigned Declarant further declares that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of pending application Serial Number 09/077,914 or any patent issuing thereon.

Signed at Leverkusen, Germany, this 14 day of June, 2002.



Norbert Eisen

s/rmc/lmw0124